

Typhoid fever, of course, is not the only disease that is water borne. Cholera, but especially with us diarrhœal affections, are. This last is quite sufficient to cause death in young and old subjects particularly. When the water is infected here the cases of diarrhœa come into evidence prominently. The typhoid death rate, however, is the usual gauge of the purity of a water supply.

Many cities show a larger rate by a good deal than Toronto. No city with a good wholesome water supply shows as high a rate as Toronto. Here we can safely say that during the last three years 88 deaths from typhoid fever have occurred that could have been avoided if we had had a pure water. The rest our neighbors are accountable for. One hundred and sixty-three deaths are only 7 per cent. of the cases that have occurred. Who is there that, knowing the misery of an attack of typhoid fever and the almost certain after effects, would not prefer a broken leg if he were given his choice? During one of the outbreaks of typhoid fever in Toronto 210 cases were members of the fraternal societies. Of these 12 died. It cost these societies, between death losses and an average weekly sick benefit of \$3 for each of those sick, \$175,000, and these workmen with their families are the ones least able to afford this loss.

Toronto's water is at times infected. This infection is from sewage reaching the intake from the sewers, chiefly from wind conditions. There is typhoid fever in Toronto beyond the unavoidable point. Toronto is not unique in this experience.

Chicago some years ago emptied all of its sewage directly by several sewers into the lake front. At distances apart four water intakes were situated one mile out from shore. The typhoid rate during the last three years of this condition was 115 per 100,000. Without altering the sewer outlets, the water intakes were carried from three to four miles out into the lake. For the next three years the rate dropped to 40 per 100,000. Then the famous drainage canal was opened. Three-quarters of the city's sewage was carried off by this to the Mississippi river. There was still the sewage of a quarter of a million of people being discharged into the lake. The typhoid fever rate for the next three years dropped to 22 per 100,000, the same rate as Toronto is now suffering from. The quantity of sewage entering Lake Michigan is now about the same as finally reaches Lake Ontario from Toronto.

At Cleveland, Ohio, with the intake a mile from shore near one of the outlets from the harbor, into which all their sewage entered, the death rate for some two years was 165 per 100,000. When water was taken by the new intake nearly four miles out from shore and at the end of the harbor farthest from the outlets, the rate dropped to 22 per 100,000.